AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (Previously Presented): A method for producing a desoxyepothilone, which comprises fermentation of *Sorangium cellulosum* in the presence of an inhibitor of the *epo*K gene product.

Claim 2 (Original): The method of Claim 1, wherein said desoxyepothilone is epothilone D.

Claim 3 (Original): The method of Claim 1, wherein said desoxyepothilone is epothilone C.

Claim 4 (Original): The method of Claim 1, wherein said desoxyepothilone is a mixture of epothilone C and epothilone D.

Claim 5 (Previously Presented): The method of Claim 1, wherein said inhibitor is a reversible inhibitor wherein said inhibitor is 2-methyl-1,2-di-3-pyridyl-1-propanone.

Claim 6 (Currently Amended): A method for producing a desoxyepothilone, which comprises fermentation of *Sorangium cellulosum* in the presence of an inhibitor of the *epo*K gene product ~~The method of Claim 1~~, wherein said inhibitor is 2-methyl-1,2-di-3-pyridyl-1-propanone.

Claim 7 (Currently Amended): A method for producing a desoxyepothilone, which comprises fermentation of *Sorangium cellulosum* in the presence of an inhibitor of the *epo*K gene product ~~The method of Claim 1~~, wherein said inhibitor is selected from the group consisting of ketoconazole, itraconazole, miconazole, furafylline, proadifen, and debrisoquin.

Claims 8-11 (Cancelled)

Claim 12 (Withdrawn): A recombinant *Sorangium cellulosum* host cell comprising an *epoK* gene that has been inactivated by mutation that produces epothilone C or epothilone D or both.

Claim 13 (Withdrawn): The host cell of Claim 12 that produces more epothilone C and epothilone D than epothilone A and epothilone B.

Claim 14 (Withdrawn): The host cell of Claim 12 that does not produce epothilone A or epothilone B.

Claim 15 (Withdrawn): The host cell of Claim 12 that produces epothilone D but not epothilone C.

Claim 16 (Withdrawn): The host cell of Claim 12 that produces epothilone C but not epothilone D.

Claim 17 (New): The method of Claim 1, wherein said inhibitor is 2-methyl-1,2-di-3-pyridyl-1-propanone.

Claim 18 (New): The method of Claim 1, wherein said inhibitor is selected from the group consisting of ketoconazole, itraconazole, miconazole, furafylline, proadifen, and debrisoquin.

Claim 19 (New): A method for producing a desoxyepothilone, which comprises fermentation of *Sorangium cellulosum* in the presence of a reversible inhibitor of a P450 enzyme,

wherein said inhibitor reduces activity of the *epo*K gene product as measured in an assay measuring conversion of epothilone D to epothilone B.

Claim 20 (New): The method of Claim 19, wherein said desoxyepothilone is epothilone D.

Claim 21 (New): The method of Claim 19, wherein said desoxyepothilone is epothilone C.

Claim 22 (New): The method of Claim 19, wherein said desoxyepothilone is a mixture of epothilone C and epothilone D.

Claim 23(New): A method for producing a desoxyepothilone, which comprises fermentation of *Sorangium cellulosum* in the presence of a reversible inhibitor of a P450 enzyme.

Claim 24 (New): The method of Claim 23, wherein said desoxyepothilone is epothilone D.

Claim 25 (New): The method of Claim 24, wherein said desoxyepothilone is epothilone C.

Claim 26 (New): The method of Claim 24, wherein said desoxyepothilone is a mixture of epothilone C and epothilone D.